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EXAMINER
JONES, HEATHER RAE

ART UNIT	PAPER NUMBER
2621	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/756,976	GREEN ET AL.
	Examiner	Art Unit	
	HEATHER R. JONES	2621	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>14 January 2004</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-64 and 67-70</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>1-64 and 67-70</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>14 January 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All b)☐ Some * c)☐ None of:
        1.☒ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
           application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>4/18/2005</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 35 is objected to because of the following informalities: the claim that 35

depends from is missing. The Examiner is going to consider the claim to be dependent

from claim 4 for examining purposes. Appropriate correction is required.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 67-70 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

Claims 67-68 defines either a computer program, a product comprising a storage

medium, or a storage medium embodying functional descriptive material. However, the

claim does not define a computer-readable medium or memory and is thus non-

statutory for that reason (i.e., "When functional descriptive material is recorded on some

computer-readable medium it becomes structurally and functionally interrelated to the

medium and will be statutory in most cases since use of technology permits the function

of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of

the presently claimed computer program, product comprising a storage medium, or

storage medium can range from paper on which the program is written, to a program

simply contemplated and memorized by a person.

Claims 69 and 70 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter. Claims 69 and 70 define a storage

medium or an optical disk embodying non-functional descriptive material.

Claim Rejections - 35 USC § 102

3.　　　The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.　　　Claims 1-57, 60, 62-64, and 67-70 are rejected under 35 U.S.C. 102(b) as being

anticipated by Brodersen et al. (U.S. Patent 6,453,459).

Regarding claim **1**, Brodersen et al. discloses an authoring method for use

in creating an audiovisual product or content (col. 5, lines 26-34), comprising the

steps of: defining a plurality of components, the components implicitly

representing functional sections of audiovisual content with respect to one or

more raw content objects, and a plurality of transitions that represent movements

between the plurality of components (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line

52; col. 9, lines 1-55; col. 13, lines 32-61); processing the plurality of components

and the plurality of transitions to provide at least an intermediate data structure of

nodes and links, where each node is associated with one or more of the raw

content objects and the links represent movement from one node to another

(Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49

– col. 18, line 9); and creating an audiovisual product or content in a predetermined output format, using the raw content objects and the intermediate data structure of the nodes and the links (Figs. 3 and 9-11; col. 13, lines 11-21).

Regarding claim **2**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 1 including that the step of processing comprises the step of producing an explicitly realized set of AV assets and respective nodes and links within the intermediate data structure in response to assessing the type of the one or more raw content objects (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18, line 9).

Regarding claim **3**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 1 including that at least one node associated with one or more raw content objects comprises a reference to the one or more raw content objects (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18, line 9).

Regarding claim **4**, Brodersen et al. discloses an authoring method for use in creating an audiovisual product (col. 5, lines 26-34), comprising the steps of: defining a plurality of components, the components implicitly representing functional sections of audiovisual content with respect to one or more raw content objects, and a plurality of transitions that represent movements between the plurality of components (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line 52; col. 9, lines 1-55; col. 13, lines 32-61); expanding the plurality of components and the plurality of transitions to provide a set of explicitly realized AV assets and an

expanded intermediate data structure of nodes and links, where each node is associated with an AV asset of the set and the links represent movement from one node to another and where at least one of the nodes being associated with reference to a predetermined raw content object (Figs. 3, 7, and 10-12; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18, line 9); and creating an audiovisual product or content in a predetermined output format, using the AV assets, the expanded intermediate data structure of the nodes and the links, and the predetermined raw content object (Figs. 3 and 9-10; col. 13, lines 11-21).

Regarding claim **5**, Brodersen et al. discloses an authoring method for use in creating an audiovisual product or content (col. 5, lines 26-34), comprising the steps of: defining a plurality of components, the components implicitly representing functional sections of audiovisual content with respect to one or more raw content objects, and a plurality of transitions that represent movements between the plurality of components (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line 52; col. 9, lines 1-55; col. 13, lines 32-61); expanding the plurality of components and the plurality of transitions to provide a set of explicitly realized AV assets and an expanded intermediate data structure of nodes and links, where each node is associated with an AV asset of the set and the links represent movement from one node to another (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18, line 9); and creating a first portion of audiovisual product in a predetermined output format, using the AV assets and the expanded

intermediate data structure of the nodes and the links, and creating a second

portion of the audiovisual product using a predetermined one of the raw content

objects (Figs. 3 and 9-11; col. 13, lines 11-21).

Regarding claim **6**, Brodersen et al. discloses an authoring method for use

in creating an audiovisual product (col. 5, lines 26-34), comprising the steps of:

defining a plurality of components, the components implicitly representing

functional sections of audiovisual content with respect to one or more raw

content objects, and a plurality of transitions that represent movements between

the plurality of components (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line 52; col.

9, lines 1-55; col. 13, lines 32-61); expanding the plurality of components and the

plurality of transitions to provide a set of explicitly realized AV assets and an

expanded intermediate data structure of nodes and links, where each node is

associated with an AV asset of the set and the links represent movement from

one node to another (Figs. 3, 7, and 10-12; col. 7, line 16 – col. 8, line 52; col. 11,

line 51 – col. 12, line 46; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20;

col. 17, line 49 – col. 18, line 9); and creating an audiovisual product or content in

a predetermined output format, using the AV assets, the expanded intermediate

data structure of the nodes and the links, wherein the audiovisual product

comprises data representing merged first and second video data (Figs. 3 and 9-

10; col. 13, lines 11-21).

Regarding claim **7**, Brodersen et al. discloses all the limitations as

previously discussed with respect to claim 1 including that the defining step

comprises defining at least one information component that comprises a reference to a raw content object (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **8**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 1 and 7 including that the reference denotes a file path to a location where the raw content object is stored (Figs. 10 and 11; col. 13, lines 32-51; col. 14, line 36 – col. 15, line 20).

Regarding claim **9**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 1 including that the defining step comprises defining at least one choice component comprising a reference to at least one raw content object, and at least one authoring parameter (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **10**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 1 and 9 including that the at least one authoring parameter is adapted to control a selection or modification of the at least one raw content object (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **11**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 1 and 9 including that the at least one authoring parameter comprises a runtime variable available during playback of

the audiovisual product (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **12**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 1 and 9 including that the at least one authoring parameter comprises an authoring-only parameter that will not be available during playback of the audiovisual product (Figs. 12 and 13; col. 17, line 49 – col. 18, line 38 – PGC).

Regarding claim **13**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 1 and 9 including that the choice component comprises a reference to a presentation template and a reference to at least one substitutable raw content object to be placed in the template according to the at least one authoring parameter (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **14**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 1 including that the defining step comprises defining at least one meta-component representing a set of components and transitions (Figs. 10-15; col. 13, lines 32-52; col. 13, line 62 - col. 15, line 20; col. 17, line 49 - col. 18, line 38; col. 22, line 62 - col. 23, line 28).

Regarding claim **15**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 1 and 9 including that the at least one meta-component is a procedurally defined representation of the set of

components and transitions (Figs. 10-15; col. 13, lines 32-52; col. 13, line 62 -
col. 15, line 20; col. 17, line 49 - col. 18, line 38).

Regarding claim **16**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claim 1 including that each transition
represents a permissible movement from one component to another component
(Fig. 10; col. 13, lines 32-52).

Regarding claim **17**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claim 1 including that each transition is
associated with a triggering event (Fig. 10; col. 13, lines 32-52).

Regarding claim **18**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claims 1 and 17 including that the triggering
event is an event occurring during playback of the audiovisual product (Fig. 10;
col. 13, lines 32-52).

Regarding claim **19**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claims 1, 17, and 18 including that the
triggering event is receiving a user command, or expiry of a timer (Fig. 10; col.
13, lines 32-52).

Regarding claim **20**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claim 1 as well as the method further
comprising the step of checking expected conformance of the audiovisual
product with the predetermined output format, using the plurality of components
and the plurality of transitions (Fig. 11; col. 13, line 61 – col. 15, line 20).

Regarding claim **21**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 1 and 20 including that the predetermined output format is a hierarchical data structure having limitations on a number of objects that may exist in the data structure at each level of the hierarchy, and the checking step comprises predicting an expected number of objects at a level and comparing the expected number with the limitations of the hierarchical data structure (Fig. 11; col. 13, line 61 – col. 15, line 20).

Regarding claim **22**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 1 and 20 including that the checking step comprises predicting an expected total size of the audiovisual product, and comparing the expected total size against a storage capacity of a predetermined storage medium (Fig. 11; col. 13, line 61 – col. 15, line 20).

Regarding claim **23**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 4 including that the expanding step comprises, for each component, building one or more of the set of explicitly realised AV assets by reading and manipulating the one or more raw content objects (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 - col. 15, line 20; col. 17, line 49 - col. 18, line 9).

Regarding claim **24**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 4 and 23 including that the defining step comprises defining at least one choice component comprising a reference to a plurality of raw content objects and at least one authoring parameter (Figs. 3, 7,

and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51); and the building step comprises: selecting one or more raw content objects from amongst the plurality of raw content objects using the at least one authoring parameter (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51); and combining the selected raw content objects to form one of the AV assets (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **25**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 4, 23, and 24 including that the method comprises repeating the selecting and combining steps to automatically build a plurality of the explicitly realised AV assets from the one of the components (col. 7, line 64 – col. 8, lines 18).

Regarding claim **26**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 4 including that the expanding step comprises: creating from each one of the plurality of components one or more explicitly realised AV assets to provide the set of AV assets (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 - col. 15, line 20; col. 17, line 49 - col. 18, line 9); creating the expanded intermediate data structure wherein each node represents one AV asset of the set (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51); and creating a set of links between the nodes (Figs. 3 and 9-11; col. 13, lines 11-21).

Regarding claim **27**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 4 and 26 including that each transition is associated between first and second components, and creating the set of links comprises evaluating each transition to create one or more links, each of the links being between a node created from the first component and a node created from the second component (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 - col. 15, line 20; col. 17, line 49 - col. 19, line 15; col. 22, line 62 – col. 23, line 28).

Regarding claim **28**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 4 including that the expanding step comprises evaluating at least one of the transitions to create exit logic associated with at least one first node, evaluating one of the components to create entry logic associated with at least one second node, and providing a link between the first and second nodes according to the entry logic and the exit logic (Fig. 3; col. 7, line 16 - col. 8, line 52; col. 9, lines 36-49).

Regarding claim **29**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 4 and 28 including that at least one of the transitions is associated with a triggering event, and the expanding step comprises evaluating the triggering event to determine the exit logic associated with the at least first one node (Fig. 3; col. 7, line 16 - col. 8, line 52; col. 9, lines 36-49).

Regarding claim **30**, Brodersen et al. discloses all the limitations as

previously discussed with respect to claim 4 as well as the method further
comprising the step of checking expected conformance of the audiovisual
product with the predetermined output format, using the AV assets and the
expanded intermediate data structure of nodes and links (Fig. 11; col. 13, line 61
- col. 15, line 20).

Regarding claim **31**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claims 4 and 30 including that the
predetermined output format is a hierarchical data structure having limitations on
a number of objects that may exist in the data structure at each level of the
hierarchy, and the checking step comprises predicting an expected number of
objects at a level and comparing the expected number with the limitations of the
hierarchical data structure (Fig. 11; col. 13, line 61 - col. 15, line 20).

Regarding claim **32**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claims 4, 30, and 31 including that the
checking step comprises predicting an expected total size of the audiovisual
product, and comparing the expected total size against a storage capacity of a
predetermined storage medium (Fig. 11; col. 13, line 61 - col. 15, line 20).

Regarding claim **33**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claim 4 including that the AV assets have a
data format specified according to the predetermined output format (Figs. 3, 9,
and 10; col. 13, lines 11-21).

Regarding claim **34**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 4 including that the AV assets each have a data format according to the predetermined output format, whilst the raw content objects are not limited to a data format of the predetermined output format (col. 5, lines 11-25).

Regarding claim **35**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 4 including that the predetermined output format is a DVD-video specification (col. 5, lines 11-25).

Regarding claim **36**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 4 including that the AV assets each comprise a video object, zero or more audio objects, and zero or more sub-picture objects (Fig. 3; col. 7 lines 16-21).

Regarding claim **37**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 4 including that the AV assets each comprise at least one video object, zero to eight audio objects, and zero to thirty-two sub- picture objects, according to the DVD-video specification (Fig. 3; col. 7, line 16 – col. 8, line 52).

Regarding claim **38**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 4 including that the creating step comprises creating objects in a hierarchical data structure defined by the predetermined output format with objects at levels of the data structure, according to the intermediate data structure of nodes and links, and where the

objects in the hierarchical data structure include objects derived from the

explicitly realised AV assets (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 -

col. 15, line 20; col. 17, line 49 - col. 18, line 9).

Regarding claim **39**, Brodersen et al. discloses all the limitations as

previously discussed with respect to claim 4 including that the predetermined

output format is a DVD-video specification and the creating step comprises

creating DVD-video structure locations from the nodes of the expanded

intermediate data structure, placing the explicitly realised AV assets at the

created structure locations, and substituting the links of the expanded

intermediate data structure with explicit references to the DVD-video structure

locations (col. 5, lines 12-25; col. 7, line 16 – col. 8, line 52).

Regarding claim **40**, Brodersen et al. discloses an authoring method for

use in creating a DVD-video product (col. 5, lines 26-34), comprising the steps of:

creating a plurality of components representing parameterized sections of

audiovisual content, and a plurality of transitions representing movements

between components (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line 52; col. 9,

lines 1-55; col. 13, lines 32-61); expanding the plurality of components and the

plurality of transitions to provide a set of AV assets and an expanded data

structure of nodes and links, where each node is associated with an AV asset of

the set and the links represent movement from one node to another (Figs. 10-12;

col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18,

line 9); and creating a DVD-video format data structure from the AV assets, using

the nodes and links, wherein the DVD-video format data structure comprises data representing merged first and second video data (Figs. 3 and 9-11; col. 13, lines 11-21).

Regarding claim **41**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 40 as well as the method comprising creating at least one information component comprising a reference to an item of AV content (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **42**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 40 as well as the method comprising creating at least one choice component comprising a reference to at least one item of AV content, and at least one parameter for modifying the item of AV content (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **43**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 40 and 42 including that the choice component comprises a reference to a presentation template and a reference to at least one item of substitutable content to be placed in the template according to the at least one parameter (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **44**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 40 and 42 including that the choice

component comprises at least one runtime variable available during playback of an audiovisual product in a DVD player, and at least one authoring parameter not available during playback (Figs. 3, 7,10, 12, and 13; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51; col. 17, line 49 – col. 18, line 38 - PGC).

Regarding claim **45**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 40 as well as the method comprising creating at least one meta-component representing a set of components and transitions (Figs. 10-15; col. 13, lines 32-52; col. 13, line 62 - col. 15, line 20; col. 17, line 49 - col. 18, line 38; col. 22, line 62 - col. 23, line 28).

Regarding claim **46**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 40 including that each transition represents a permissible movement from one component to another component, each transition being associated with a triggering event (Fig. 10; col. 13, lines 32-52).

Regarding claim **47**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 40 and 46 including a triggering event includes receiving a user command, or expiry of a timer (Fig. 10; col. 13, lines 32-52).

Regarding claim **48**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 40 including that the expanding step comprises: creating from each one of the plurality of components one or more AV

assets to provide the set of AV assets (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line 52; col. 9, lines 1-55; col. 13, lines 32-61); creating the expanded data structure wherein each node represents one AV asset of the set (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18, line 9); and creating a set of links between the nodes (Figs. 3 and 9-11; col. 13, lines 11-21).

Regarding claim **49**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 40 and 42 including that the expanding step comprises evaluating each choice component to create a plurality of AV assets according to each value of the at least one parameter (Figs. 3, 7, and 10; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-51).

Regarding claim **50**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 40, 42, and 49 including that evaluating each choice component comprises creating entry logic associated with at least one node and/or evaluating at least one transition to create exit logic associated with at least one node, and providing a link between a pair of nodes according to the entry logic and the exit logic (Fig. 3; col. 7, line 16 - col. 8, line 52; col. 9, lines 36-49).

Regarding claim **51**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 40 as well as the method comprises

the step of checking expected conformance with the DVD-video format using the created components and transitions (Fig. 11; col. 13, lines 32-52).

Regarding claim **52**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 40 as well as the method comprising the step of checking expected conformance with the DVD-video format using the set of AV assets and the expanded data structure of nodes and links (Figs. 10-12; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18, line 9).

Regarding claim **53**, Brodersen et al. discloses an authoring method for use in creating an audiovisual product according to a DVD-video specification (col. 5, lines 26-34), comprising the steps of: generating a set of AV assets each comprising a video object, zero or more audio objects and zero or more sub-picture objects, and an expanded data structure of nodes and links, where each node is associated with one AV asset of the set and the links represent navigational movement from one node to another (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line 52; col. 9, lines 1-55; col. 13, lines 32-61); and creating a DVD-video format data structure from the set of AV assets, using the nodes and links (Figs. 3 and 9-11; col. 13, lines 11-21); the method characterized by the steps of: creating a plurality of components and a plurality of transitions, where a component implicitly defines a plurality of AV assets by referring to a presentation template and to items of raw content substitutable in the presentation template, and the plurality of transitions represent navigational

movements between components (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line 52; col. 9, lines 1-55; col. 13, lines 32-61); and expanding the plurality of components and the plurality of transitions to generate the set of AV assets and the expanded data structure of nodes and links, wherein the set of AV assets and the expanded data structure of nodes and links comprise data representing merged first and second video (Figs. 3, 7, and 10-12; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18, line 9).

Regarding claim **54**, Brodersen et al. discloses all the limitations as previously discussed with respect to claim 53 including that for merging first and second data associated with first and second DVD-Video zone directories respectively; the method comprising the steps of: identifying the registers used by at least one of the first and second data; allocating use of the registers to at least one of the first and second data according to said identifying; and creating data associated with video manager information (VMGI) of the DVD-video disc image data to accommodate at least one of the first and second DVD-Video zones (Figs. 11 and 13; col. 23, lines 9-28; col. 24, line 50 - col. 25, line 27).

Regarding claim **55**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 53 and 54 as well as the method comprising the step of collating the first and second data to produce DVD-Video data (Figs. 11 and 13; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12,

line 46; col. 13, lines 32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 –

col. 18, line 9; col. 24, line 50 - col. 25, line 27).

Regarding claim **56**, Brodersen et al. discloses all the limitations as

previously discussed with respect to claims 53 and 54 including that at least one

of the first and second data comprises at least one of a Group of Pictures, a

Video Object, a Video Object Set, a Video Object Unit, a Cell, Program, Part of

Title, Program Chain, Title, Navigation Pack, Video Pack, Audio Pack or DVD-

Video disc image data (Figs. 11 and 13; col. 23, lines 9-28; col. 24, line 50 - col.

25, line 27).

Regarding claim **57**, Brodersen et al. discloses all the limitations as

previously discussed with respect to claims 53 and 54 including that the step of

creating comprises the step of creating menu data of video manager menu data

(video_ts.vob) to access at least one of the first and second data (Figs. 11 and

13; col. 23, lines 9-28; col. 24, line 50 - col. 25, line 27).

Regarding claim **60**, Brodersen et al. discloses all the limitations as

previously discussed with respect to claims 53 and 54 including that the first and

second data were created using respective, different, authoring tools or by

different authors using the same tool (Figs. 3 and 7; col. 7, line 16 - col. 8 line 52;

col. 9, lines 1-55; col. 13, lines 32-61; col. 11, line 52 – col. 12, line 47).

Regarding claim **62**, Brodersen et al. discloses all the limitations as

previously discussed with respect to claims 53 and 54 as well as the method

further comprising the step of creating the first data using a respective authoring

tool and performing the steps of any preceding claim using that respective
authoring tool (Figs. 3 and 7; col. 7, line 16 - col. 8 line 52; col. 9, lines 1-55; col.
13, lines 32-61; col. 11, line 52 – col. 12, line 47).

Regarding claim **63**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claim 53 including that merging first and
second video data (VTSs) (Figs. 3, 9-11, and 13; col. 13, lines 11-21; col. 23,
lines 9-28; col. 24, line 50 - col. 25, line 27); the method comprising the steps of:
assessing potential use of a predeterminable resource by at least one of the first
and second video data (Fig. 3, 10, and 11; col. 7, line 16 - col. 8 line 52; col. 9,
lines 1-55; col. 13, lines 32-61); allocating use of the predeterminable resource to
at least one of the first and second video data according to the step of assessing;
collating the first and second video data to create DVD-Video data (Figs. 11 and
13; col. 7, line 16 – col. 8, line 52; col. 11, line 51 – col. 12, line 46; col. 13, lines
32-52; col. 13, line 62 – col. 15, line 20; col. 17, line 49 – col. 18, line 9; col. 24,
line 50 - col. 25, line 27); and creating data associated with video manager
information (VMGI) of the DVD-Video data to accommodate at least one of the
first and second video data (Figs. 11 and 13; col. 23, lines 9-28; col. 24, line 50 -
col. 25, line 27).

Regarding claim **64**, Brodersen et al. discloses all the limitations as
previously discussed with respect to claims 53 and 63 including that the
predeterminable resource is at least one of GPRM registers, titles and part titles
(Figs. 11 and 13; col. 23, lines 9-28; col. 24, line 50 - col. 25, line 27).

Regarding claim **67**, this is a computer program claim corresponding to the method claim 1. Therefore, claim 67 is analyzed and rejected as previously discussed with respect to claim 1.

Regarding claim **68**, this is a product comprising a storage medium claim corresponding to the method and computer program claims 1 and 67. Therefore, claim 68 is analyzed and rejected as previously discussed with respect to claims 1 and 67.

Regarding claim **69**, this is a storage medium claim corresponding to the method claim 1. Therefore, claim 69 is analyzed and rejected as previously discussed with respect to claim 1.

Regarding claim **70**, this is an optical disk claim corresponding to the method claim 1. Therefore, claim 70 is analyzed and rejected as previously discussed with respect to claim 1. Furthermore, Brodersen et al. discloses in Fig. 2 an optical disk (DVD) for storing the audiovisual product authored according to claim 1 (col. 7, lines 2-8).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Brodersen et al. as applied to claims 53 and 54 above, and further in view of Otala

et al. (U.S. Patent 7,200,321).

        Regarding claim **58**, Brodersen et al. discloses all the limitations as

previously discussed with respect to claims 53 and 54, but fails to disclose that

the method further comprises the step of establishing a backup copy of the data

associated with the video manager information.

        Referring to the Otala et al. reference, Otala et al. discloses a method that

comprises the step of establishing a backup copy of the data associated with the

video manager information (Figs. 4 and 6; col. 1, lines 46-51; col. 7, lines 11-23).

        Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to have backed up the video management

information as disclosed by Otala et al. in the method disclosed by Brodersen et

al. in order to have a copy of the video management information in case the

original version were to get damaged therefore rendering the disc unusable.

        Regarding claim **59**, Brodersen et al. in view of Otala et al. discloses all

the limitations as previously discussed with respect to claims 53, 54, and 58

including that the step of establishing a backup copy of the data associated with

the video manager information comprises the step of creating VMGI backup

information (video_tg.bup) (Figs. 4 and 6; col. 1, lines 46-51; col. 7, lines 11-23).

7.   Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Brodersen et al. as applied to claims 53 and 54 above.

Regarding claim **61**, Brodersen et al. discloses all the limitations as previously discussed with respect to claims 53 and 54, but fails to disclose that the method further comprises, prior to the step of identifying, the step of determining whether or not at least one of the first and second data has associated copy protection. Official Notice is taken that it is well known to check for copy protection data in order to protect the data. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have checked for associated copy protection in order to ensure that the contents on the DVD are not illegally copied.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HEATHER R. JONES whose telephone number is (571)272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John W. Miller/   Heather R Jones
Supervisory Patent Examiner, Art Unit 2623   Examiner
                                                            Art Unit 2621

HRJ
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